

ABSTRACT

In a first aspect, a method is provided for scheduling connections for a network processor. The method includes the steps of, in a cache, scheduling a plurality of connections to be serviced based on quality of service parameters stored in a control structure corresponding to each connection and during a scheduling opportunity (1) identifying one or more of the plurality of connections in the cache to be serviced; (2) selecting one of the connections identified to be serviced; (3) servicing the selected connection; (4) accessing one or more portions of the control structure in the cache; (5) calculating a next service time when the selected connection is to be serviced; and (6) determining whether to schedule the selected connection to be serviced in one of the cache and a calendar based on the next service time. Numerous other aspects are provided.